

VL 26162-66 EPF(n)-2/EWT(d)/EWT(1)/ETC(t)/EWG(m) IJP(c) WW

ACC NR: AP6006147

SOURCE CODE: UR/0376/65/001/010/1397/1405

AUTHOR: Marnevskaia, L. A.64
BORG: Institute of Mathematics, AN BSSR (Institut matematiki AN BSSR)TITLE: Solution of a system of differential equations encountered in the theory of heat and mass transferSOURCE: Differentsial'nyye uravneniya, v. 1, no. 10, 1965, 1397-1405

TOPIC TAGS: heat transfer, heat conductivity, parabolic differential equation

ABSTRACT: The present work solves a problem from the theory of heat and mass transfer for the case of a two-layer unbounded plate. The mathematical statement of the problem is reduced to finding the solution of the following system of equations.

$$\begin{aligned} \frac{\partial u_1}{\partial t} &= a_{11}^1 \frac{\partial^2 u_1}{\partial x^2} + a_{12}^1 \frac{\partial^2 v_1}{\partial x^2} + f_1^1(x, t), \\ \frac{\partial v_1}{\partial t} &= a_{21}^1 \frac{\partial^2 u_1}{\partial x^2} + a_{22}^1 \frac{\partial^2 v_1}{\partial x^2} + f_2^1(x, t), \end{aligned} \quad -\infty < x \leq h, \quad (1)$$

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$$\begin{aligned} \frac{\partial u_2}{\partial t} &= a_{11}^2 \frac{\partial^2 u_2}{\partial x^2} + a_{12}^2 \frac{\partial^2 v_2}{\partial x^2} + f_1^k(x, t), \\ \frac{\partial v_2}{\partial t} &= a_{21}^2 \frac{\partial^2 u_2}{\partial x^2} + a_{22}^2 \frac{\partial^2 v_2}{\partial x^2} + f_2^k(x, t), \end{aligned} \quad h \leq x < \infty, \quad (2)$$

where a_{ij}^k are constants; $f_j^k(x, t)$ are given functions ($i, j, k = 1, 2$). They satisfy the initial conditions

$$u_i(x, 0) = F_1^i(x); v_i(x, 0) = F_2^i(x) \quad (i=1, 2) \quad (3)$$

and the conditions at juncture ($x = h$)

$$\begin{aligned} u_1 - u_2|_{x=h} &= \varphi_1^1(t); \quad v_1 - v_2|_{x=h} = \varphi_2^1(t); \\ d_{11}^1 \frac{\partial u_1}{\partial x} + d_{12}^1 \frac{\partial v_1}{\partial x} - \left(d_{11}^2 \frac{\partial u_2}{\partial x} + d_{12}^2 \frac{\partial v_2}{\partial x} \right) \Big|_{x=h} &= \varphi_1^2(t); \quad (4) \\ d_{21}^1 \frac{\partial u_1}{\partial x} + d_{22}^1 \frac{\partial v_1}{\partial x} - \left(d_{21}^2 \frac{\partial u_2}{\partial x} + d_{22}^2 \frac{\partial v_2}{\partial x} \right) \Big|_{x=h} &= \varphi_2^2(t) \end{aligned}$$

where a_{ij}^k are constants, $\varphi_j^k(t)$ are given functions ($i, j, k = 1, 2$), under the assumption that the desired solution is bounded at $x = \infty$. A similar problem was earlier

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ACC NR: AP6006147

formulated but not solved for the case of a finite two-layer plate, the author limiting himself only to reflections regarding the method of its solution (A. V. Ivanov, *Teplofizika v liteynom proizvodstve*, Minsk, Izd-vo AN BSSR, 1963). Related transfer problems in the case of a homogeneous medium have been solved by A. V. Ivanov (1962), P. V. Tsoy (1961, 1963), and A. P. Prudnikov (1957, 1958). No works are known, however, which have solved a problem similar to the problem (1)-(4) as formulated here. The present author solved a partial case of the present more general problem. In the present work the author reduces the system (1)-(4) to briefer matrix formulation with corresponding matrix description of the boundary conditions. The matrix problem is solved by the method of operational calculus based on application of the Laplace transform in the variable t and utilization of the so-called cell Green matrix. Orig. art. has: 1 figure, 20 formulas.

SUB CODE: 12,20/

SUBM DATE: 17Apr65/

ORIG REF: 007/

OTH REF: 000

Card 3/3 12

BABAYEV, K.L.; MARNITS, I.E.

Basic problems and trends in the work of the Central Asiatic Scientific
Research Institute of Geology and Mineral Resources. Uch.zap. SAIGIMSa
no.10:3-10 '63. (MIRA 17:2)

BAKCHINAY, A.Ya., artist; B. I. G. P. I., U. Ye., artist; B. I. G. P. I., U. Ye., artist;
M. I. G. P. I., U. Ye., artist; M. I. G. P. I., U. Ye., artist.

Exhibitions and displays of media items. Inform. ...
11-15 S 16a. ...

1. Davilon "Kishcheskoy. Pribor emest!" na ystarko nestiterny
neridnoe khorozhiva klas. "P. I. G. P. I., U. Ye." "Kishcheskoy"
na ystarko nestiterny khorozhiva klas. "P. I. G. P. I., U. Ye."
2. Davilon "Kishcheskoy. Pribor emest!" na ystarko nestiterny
khorozhiva klas. "P. I. G. P. I., U. Ye." "Kishcheskoy"
na ystarko nestiterny khorozhiva klas. "P. I. G. P. I., U. Ye."
"Kishcheskoy" na ystarko nestiterny khorozhiva klas. "P. I. G. P. I., U. Ye."
Kubickoy.

MARNAUTOV, G.Ye.; YABLOKOV, V.A.

Die for blanking parts in a metal roll or sheet. Mashinostroitel'
nc.7:15 J1 '65. (MIRA 18:7)

MARNEVSKAYA, L.A.

Solution of a system of differential equations applied in the theory
of heat and mass transfer. Dif. urav. 1 no.10:1397-1405 0 '65.

(M. RA 18710)

1. Institut matematiki AN BSSR.

MARNOV, D. I., Cand Agric Sci (diss) -- "Providing trace elements (Cu, Co) to dairy cows under the conditions of the Moscow area". Moscow, 1959. 21 pp (Moscow Order of Lenin Agric Acad im K. A. Timiryazev), 110 copies (KL, No 9, 1960, 127)

POPOV, I.S., akademik;MARNOV, D.I., aspirant

Copper and cobalt requirement of cows on farms near Moscow. Izv.
TSKhA no.5:123-138 '59 (MIRA 13:3)

1. Vsesoyuznaya akademika sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (for Popov).
(Moscow Province--Cows--Feeding and feeds)
(Cobalt) (Copper)

MARNOV, D.^{I.} kand. sel'skokhozyaystvennykh nauk

Control of the content of common salt in mixed feeds. Muk.-elev.
prom. 28 no.10:9-10 0 '62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i
produktov yego pererabotki.
(Salt) (Feeds--Analysis)

МАРЬЯНАКИ, И.А.

USSR:

Maryanaki, I. A. Diffraction of waves about a submerged vertical plate. Akad. Nauk SSSR, Prikl. Mat. Meh. 18, 233-238 (1954). (Russian)

The plate of the title occupies the portion of the y -axis between $-a$ and $-b$. The problem is treated two-dimensionally and the surface waves are assumed infinitesimal. This leads to a boundary-value problem for the velocity potential. The same problem has been treated before by Dean [Proc. Cambridge Philos. Soc. 41, 231-238 (1945); these Rev. 8, 110] and Ursell [ibid. 43, 374-387 (1947); these Rev. 9, 117] of whose work the author was apparently unaware. He arrives at the same result for the transmission coefficient and phase shift. New is a treatment of the surface profile near the barrier.

J. V. Helousova.

ps

MARNYANSKIY, I.A. (Rovno)

Our objections. Mat. v shkole no.1:56-57 Ja-F '63. (MIRA 16:6)
(Mathematics—Study and teaching)

MARGULIS, B.Ye. (Smolensk); MARNYANSKIY, I.A. (Rovno); OREKHOV, P.S.
(Izhevsk); ZYABLITSKIY, V.V. (Kalinin)

Extracurricular work in mathematics. Mat. v shkole no.1:68-75
Ja-F '63. (MIRA 16:6)
(Mathematics—Study and teaching)

MARNYANSKIY, I.A. (Rovno)

Elementary proof of Simpson's rule. Mat. v shkole no.2:28-30 Mr-Apr '63.

(Series, Taylor's)

(Algebra—Study and teaching)

(MIRA 16:4)

SOV/124-59-1-296

Translation from: Referativnyy zhurnal. Mekhanika, 1959, Nr 1, p 38 (USSR)

AUTHOR: Marochek, V.I.

TITLE: Determination of the Expansion Degree in Turbines and Calculation of the Cycle of Two-Shaft Gas Turbine Units

PERIODICAL: Tr. Dal'nevost. politekhn. in-ta, 1957, Vol 46, Nr 8, pp 1-6

ABSTRACT: For two schemes of two-shaft gas turbine units, which are connected by the gasduct only, the sequence of calculations is given for the determination of the optimum-values of the expansion-degree, the distribution of the output between the turbines, the efficiency and the specific parameters of the units for the usually given quantities.

M.A. Peshkin

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Card 1/1

KIRILYUK, Ye.V.; BORISOV, V.I.; KLIMENKO, N.A.; MAROCHEK, Ye.I.

Results of the use of nutrient media from the meat and stomachs of sea animals of the Far East sea basin for the determination of the pathogenicity of diphtheria bacteria. Trudy VladIEMG no.2:247-248 '62. (MIRA 18:3)

1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny; Tikhookeanskogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii i Vladivostokskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.

MAROCCHINI, V.; KUIS, M.

Silicosis in the silica sand quarry Saulaga near Pula. Arh.hig.
reda 6 no.1:11-22 1955

1. Higijenski zavod, Rijeka i Vojna bolnica i Antituberkulozni
dispanzer, Pula.

(SILICOSIS, prev. & control
in Yugosl.silica quarries (Ser))

MARCHELLI, Walter, dr.;

Operational
to bronchopneumonia

... ..
... ..

MAROCHKIN, A.I.; KASHIRIN, A.I.; BOGUSLAVSKIY, B.L. [editors].

[Automatic control in industry] Avtomatizatsiia tekhnologicheskikh protsessov.
[Nauchnye redaktory: A.I.Marochkin, A.I.Kashirin, B.L.Boguslavskii] Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951 314 p. (MIRA 6:8)

1. Vsesoyuznoye nauchnoye inzhenerno-tekhnicheskoye obshchestvo mashinostroyeniya. Moskovskoye otdeleniye.
(Automatic control)

MAROGHKIN, A.S.; STARIKOV, V.S.

Some structural elements of the Kakadur-Khanikomskoye deposit.
Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:10-15 '61. (MIRA 14:8)

1. Trest "Sevkavtsvetmetrazvedka" i Severokavkazskiy gornometallurgicheskiy institut.

(Ossetia--Ore deposits)
(Geology, Structural)

BARYSHEV, A.N.; MAROCHKIN, A.S.

Concerning the article by G.V.Charushin, and S.I.Sherman "Two
ways of speeding up the construction process of fabric diagrams."
Sov.geol. 5 no.9:151-152 S '62. (MIRA 15:11)
(Geology--Charts, diagrams, etc.)
(Charushin, G.V.) (Sherman, S.I.)

KORCHEVSKIY, E.M.; MAROCHNIK, L.S.

Magneto-hydrodynamic version of blood circulation. Biofizika 10 no.2:371-
373 '65. (MIRA 18:7)

1. Institut astrofiziki AN Tadzhikskoy SSR, Dushanbe.

LEBEDEV, V.I.; MAKSUMOV, M.N.; MAROCHNIK, L.S.

Collective processes in gravitating systems. Part 1. Astron. zhur.
(2 no.4: 69-717 J1-Ag '65. (MIRA 18:8)

1. Astrofizicheskiy institut AN TadzhSSR.

MAROCHKIN, N.I., glavnyy red.; MARKOVSKIY, A.P., zamestitel' glavnogo red.;
TATARINOV, P.M., zamestitel' glavnogo red.; BELYAKOVA, Ye.Ye.,
nauchnyy red.; GANESHIN, G.S., red.; ZAYTSEV, I.K., red.; KULIKOV,
M.V., red.; KUREK, N.N., red.; KNIPOVICH, Yu.N., red.; LUR'YE, M.L.,
red.; SIMONENKO, T.N., red.; SPIZHARSKIY, T.N., red.; STERLIN, D.Ya.,
red.

[Results of the research carried out by the All-Union Geological
Institute in 1959] Ezhegodnik po rezul'tatam rabot VSEGEI za 1959
g. Leningrad, Otdel nauchno-tekh.informatsii VSEGEI, 1961. 195 p.
(Informatsionnyi sbornik, no.44). (MIRA 15:4)
(Geology)

MAROCHKIN, N.N.; SHAFRANOVSKIY, I.I.

Crystallography of synthetic ruby pearls. Zapiski Vsesoyuz. Mineralog.
Obshchestv a 82, 60-2 '53. (MLRA 6:4)
(CA 47 no.17:8456 '53)

MAROCHKIN, N.N., Cand Tech Sci -- (diss) "Axiosymmetrical
stress state of the zone of actual contact of rough
surfaces under conditions of full ~~xxx~~ elasticity."
Mos, 1-57, 7 pp, one sheet ~~with~~st graphs (Inst of Machine
Science of Acad Sci USSR) (PL, 24-58, 132)

- 60 -

MAROCHKIN, V.N.

Calculating the coefficient of friction for two rough surfaces.
Tren. i izn. mash. no. 12:144-162 '58. (MIRA 11:8)
(Friction)

S/123/60/000/020/019/019
A005/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 20, p. 478,
113278

AUTHORS: Marochkin, V. N., Chichinadze, A. V.

TITLE: Calculation of the Resistance Forces in Disk Brakes 3

PERIODICAL: V sb.: Povysheniye effektivnosti tormozn. ustroystv. Svoystva frikts.
materialov. Moscow, AN SSSR, 1959, pp. 170-179

TEXT: The calculation of the resistance forces is presented, which arise
from the friction in the disk brakes applied in the aviation. The existent
calculation methods are criticized.

V. O. S

Translator's note: This is the full translation of the original Russian abstract



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Marocikin, V. N.

Resistance of a Single Elastic-Deformation Contact

Sulhoye i granichnoye treniye. Friktionnyye materialy (Dry and Boundary Friction. Friction Materials.) Moscow, Izd-vo AN SSSR, 1960. 302 p. Errata slip inserted. 3,500 copies printed. (Series: Its: Trudy, v. 2)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.
Resp. Ed.: I. V. Kravtchukiy, Doctor of Technical Sciences,
Professor; Ed. of Publishing House: K. I. Mikhailov; Tech.
Ed.: S. G. Tikhomirova.

The collection published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya Konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines, April 9-15, 1958).

STRELYUKHIN, A.K., prof.; SHELEST, Ye.N.; SHCHERBAKOVA, N.I.; GRIGOR'YEV,
V.I.; MAROCHKIN, V.V.

Examination of the higher nervous activity in workers of the
carbon disulfide department of the Ryazan Combine of Artificial
Fibers. Nauch. trudy Riaz.med.inst. 23:97-103 '63.
(MIRA 18:12)

1. Kafedra psikhologii (zav. kafedroy - prof. A.K.Strelyukhin.)
Ryazanskogo meditsinskogo instituta imeni akademika I.P.
Pavlova.

BARANOV, A.F., kand.med.nauk; MAROCHKINA, I.A., vrach; KONOPIKHINA, T.A.,
vrach; KOLOKOLOVA, N.V., kand.med.nauk; YAKIMENKO, O.V., kand.
med.nauk; PANOVA, L.M., kand.med.nauk

Treatment of onychomycoses with **keratolytic** and fungicidal plasters.
Vest.derm.i ven. no.1:65-67 '62. (MIRA 15:1)

1. Mikologichkoye otdeleniye Moskovskoy gorodskoy bol'nitsy
No.23 imeni Medsantrud (for Marochkina, Kononikhina).
 2. Poli-
klinika No.1 Ministerstva zdravookhraneniya RSFSR (for Kolokolova).
 3. Tsentral'naya poliklinika No.1 Ministerstva oborony SSSR
(for Yakimenko).
 4. Tsentral'naya poliklinika No.1 Ministerstva
zdravookhraneniya RSFSR (for Panova).
- (DERMATOMYCOSIS) (NAILS (ANATOMY)—DISEASES)
(PLASTERS (PHARMACY))

ORG. : USSR
 TITLE : Nutritional Control of Growth of Leguminous Plants.
 AUTHOR : [illegible]
 ABSTRACT : [illegible]
 SOURCE : [illegible]
 PUBL. : [illegible]
 ABSTRACT : [illegible]

* [illegible], N.Y.

C. 101 : 1/1

MAROCHNIK, L.S.

Correlation of geomagnetic perturbations and the activity of
comets. Biul. Inst. astrofiz. AN Tadzh. SSR no.32:38-41 '62.
(MIRA 17:11)

MARUCHKO, S.V.

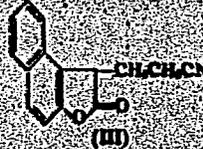
Dimethylaminomethylation of 2-naphthol - N. A. Dobson
 (Inv. 1, Soviet State, Obshch. Akad. Nauk S.S.S.R. 1: 617-9 (1953)) - To 200 g 50% aq. MeNH₂ at 0° was added over 1.5 hrs. 100 g 36% formalin and the mixt. treated with 200 g K₂CO₃ distn. of the org. layer gave 60% CH₂NMe₂; b. 80-85° (II). To 72 g I was added with stirring 102 g 2-C₂H₅OH and the mixture heated 2.5 hrs. to 70-80°, cooled, taken up in 200 ml 18% HCl, filtered, and treated with 28 g NaOH in 150 ml H₂O to yield a ppt. of 127 g 1-dimethylaminomethyl-2-naphthol (II) in 74-80° 93% with recovery from the soln. To 21 g I was added 60 g 80% aq. AcOH and the soln. added to 28.8 g 2-C₂H₅OH; the mixt. allowed to stand overnight and treated with NaOH, gave 10% II. To 40 g 50% aq. MeNH₂ at 0° was added over 21 g 36% formalin; after 1 hr. at room temp. the mixt. was added to 30 g 2-C₂H₅OH; allowed to stand 4 hrs. the ppt. sep'd, taken up in 10% HCl and treated with NaOH, as above, yielding 10% II. To 23 g 50% aq. MeNH₂ at 0° was added 21 g 36% formalin and the mixt. poured into 30 g 2-C₂H₅OH (temp. rise to 40-50°) to yield the crystalline product, which purified as above gave 70% II. To 60 g 80% AcOH was added with cooling 70 g 50% MeNH₂ followed by 12 g 36% formalin and the soln. treated at room temp. with 72 g 2-C₂H₅OH and heated to 70° gave after a total boiling of 1 hr. (5 min at 100°) 100 g residues which was recrystallized

MAROCHKO, S.V.

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mg with KOH, m.p. 117° (from EtOH), and pptn. with HCl gave 63% free acid (II), m. 148° (from H₂O). I treated with Me₂SO in 10% NaOH at 20-30° gave 80% 1-(2-acetylnaphthyl)acetic acid, m. 111° (from EtOH), while I with EtCl in 10% NaOH gave 67% 1-(2-acetylnaphthyl)acetic acid, m. 163.5-7° (from Me₂SO). I (15 g.) and 30 g. Ac₂O refluxed 18 hrs. gave 80% lactone (III), m. 102°. II (1.8 g.) in dioxane treated with 0.56 g. KCN in abs. EtOH followed by 1.6 g. CH₂:CHCN, and refluxed 3 hrs. gave 20% III, m. 91° (from H₂O). Me₂SO added slowly (18.2 g.)

Reactions of mobile amino group. I. Reactions of substitution of the dimethylamino group in 1-(dimethylamino-methyl)-2-hydroxynaphthalene. A. P. Terent'ev, A. N. Kost, N. A. Dabaevskii, and S. V. Marochko, Moscow State Univ., *Soviet Sci. (Abstracts)*, Nov. 1953, p. 610-16 (1953); cf. preceding abstr. 1-(Dimethylamino-methyl)-2-hydroxynaphthalene (53 g.) in 200 ml. EtOH with 57.5 g. KCN in 85 ml. H₂O heated in an autoclave 3.5 hrs. at 180-200° gave on cooling a brown ppt. of K-1-(2-hydroxynaphthyl)acetate, in 76% yield; wash

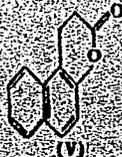


to 20 g. 1-(dimethylamino-methyl)-2-hydroxynaphthalene in 60 ml. EtOH, the resulting soln. added over 1 hr. to 30.5 g. cryst. Na₂SO₄ in 60 ml. H₂O at 20°, heated 2 hrs. and cooled, yielded 61% 1-(2-hydroxynaphthyl)acetone/acetic acid, plates (from dil. EtOH). 5-hydroxynaphthalene-2-one (IV), m. 224-7°. IV is formed in 72% yield when 30.5 g. cryst. Na₂SO₄, 8.6 g. 35% formalin, and 20 ml. H₂O are treated with 14.4 g. 2-C₂H₅OH, heated 6 hrs. at 20-30°, filtered and acidified with H₂SO₄. CH₂(CO₂Et)₂ (20 g.) was added to 7 g. Na in 100 ml. EtOH, followed by slow addition of 30 g. 1-(dimethylamino-methyl)-2-hydroxynaphthalene and 150 g.

Handwritten initials or signature.

1. N. T. G. L. M. T. E. V. 4/2

Me₂SO, in 40 ml. EtOH, heated 5 hrs., the solid product treated with H₂O, 10% HCl and exhd. with Et₂O. The cat. gave 13 g. unreacted CH₃(CO₂Et), which was distd. The residue taken up in 30% NaOH and refluxed 4 hrs., dhd. with H₂O, acidified with HCl and steam distd., yielded 0.7 g. 2-MeOC₂H₅, the albin. residue was exhd. with Et₂O, yielding 10% V. b. 60-185° (decompn.), m. 69.3° (from petr. ether). Ac₂CH₂CO₂Et (62.5 g.) was added to 7 g. Na in 135 ml. EtOH, heated 1 hr., treated with 20 g. 1-(di-



methylaminomethyl)-2-hydroxynaphthalene and 12 g. Me₂SO, in 50 ml. EtOH, refluxed 8.5 hrs., filtered, concd. in vacuo, treated with 100 ml. H₂O, refluxed 0.5 hr., acidified with 10% HCl (much CO₂ evolves) and exhd. with Et₂O to yield, on evapn., 23% 1-(2-hydroxy-1-methyl)-2-butenone, b. 72.5-4.5° (pressure unstated although distn. in vacuo is specified), m. 51-2° (from petr. ether). A small amount of unidentified material, m. 211°, was also isolated.

G. M. Kostopoff

BOGDANOV, S.V.; MAROCHEK, S.V.

Action of diethylphosphorous acid on 1,2-naphthoquinone. Zhur. VKHO
5 no.6:713 '60. (MIRA 13:12)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley im. K.Ye.Voroshilova.
(Phosphorous acid) (Naphthoquinone)

MAROGHNIK, K.Ye.

Case of bronchial foreign bodies. Vest.oto-rin. 17 no.2:78 Mr-Ap
'55. (MIRA 8:7)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. prof. I.M.Burakov)
Astrakhanskogo meditsinskogo instituta.

(BRONCHI, foreign bodies,
case report)

(FOREIGN BODIES,
bronchi, case report)

TESLER, Pinkhus Abovich; MAROCHNIK, L.I., red.; TELYASHOV, R.Kh.,
red.izd-va; BELOGUROVA, I.A., ~~tekm.~~ red.

[Ventilated cellular-concrete roofs without garrets] Bes-
cherdachnye ventiliruemye kryshi iz iacheistogo betona.
Leningrad, 1963. 15 p. (Leningradskii dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya:
Stroitel'nye materialy i konstruktsii, no.7)
(MIRA 17:1)

10.2000(A)
3.1530

81843

S/033/60/037/03/012/027

E032/E314

AUTHOR: Marochnik, L.S.

TITLE: On the Form of Cometary Envelopes

PERIODICAL: Astronomicheskii zhurnal, 1960, Vol 37, Nr 3,
pp 508 - 512 (USSR)

ABSTRACT: It is well known that the mechanical theory of cometary forms meets with serious difficulties. The present paper is an attempt to remove these difficulties, with the aid of the Alfvén hypothesis. (Refl). According to this hypothesis the ray systems in comets with ionised tails can be qualitatively explained by the fact that during an interaction with a solar corpuscular stream the resulting shock wave gives rise to the thermal ionisation of the cometary gas, which in its turn produces the freezing-in of the magnetic lines of force of the corpuscular stream into the cometary gas. As the comet continues to move, the lines of force tend to be separated by the head of the comet and assume the form of rectilinear rays diverging from the Sun. Magnetohydrodynamic waves can then be propagated along these rays (Figure 1). If Alfvén's hypothesis is accepted (at least in essence,

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E032/E314

On the Form of Cometary Envelopes

although the cause of the ionisation is still doubtful), then it is necessary to assume that the ionisation of the gas takes place after a certain time interval after the collision of the comet with the corpuscular stream. Thus, in order to obtain a quantitative explanation of cometary forms in the case of ionised tails, one must solve the equations of magnetohydrodynamics subject to the appropriate boundary conditions. If the ionisation is sufficiently rapid, the conductivity may be assumed to be infinite. In that case the form of the head of the comet is fully determined by the equation of magnetic lines of force:

$$dy/H_y = dz/H_z$$

in view of the condition:

$$\frac{d}{dt} \begin{pmatrix} \vec{H} \\ \rho \end{pmatrix} = \begin{pmatrix} \vec{H} \\ e \end{pmatrix} \nabla \cdot \vec{v} .$$

Card2/5

✓

81843

S/033/60/037/03/012/027
E032/E314

On the Form of Cometary Envelopes

Owing to the complexity of the problem when formulated in this general way, the present author considers a simplified problem in which the magnetic lines of force are looked upon as elastic threads. It is known (Alfven, Ref 7) that this approach leads to results which are mathematically equivalent to those in the case of a strictly magnetohydrodynamic approach. Thus, the process of formation of a given cometary form can be described with the aid of the following model. The magnetic lines of force due to the corpuscular stream which have been frozen-in into the ionised gas of the comet (and at the same time into the plasma of the stream) and which are moving together with this gas, can be looked upon as perfectly elastic threads whose ends are fixed on the "boundary" of the cometary gas and the corpuscular stream. These threads are then bent by a uniformly distributed load due to the motion of the comet (Figure 1). The lines of force are "materialised" owing to the propagation of ionised matter ejected from the nucleus of the comet along them. Using this model

Card3/5

4

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S/033/60/037/03/012/027

E032/E314

On the Form of Cometary Envelopes

it is shown that the form of the cometary envelope can be described by a catenary. This is in agreement with observations. The parabolic dependence which follows from the mechanical theory of cometary forms is only a rough approximation. The transverse motions observed in cometary tails are then explained with the aid of Alfvén waves, assuming that the density of the cometary gas and of the corpuscular stream is the same (and constant). The conductivity of the plasma in the stream is assumed to be infinite. These calculations are used to estimate the upper limit of the magnetic field of the corpuscular stream and it is shown that if $\rho \sim 10^{-4}$ g/cm³ and using the results reported by Fokker (Ref 8) and Kayling (Ref 13),

$$H_0 \ll 10^{-2} \text{ Oe .}$$

Acknowledgment is made to O.B. Dobrovolskiy for valuable advice and discussions.

Card4/5



81843

S/033/60/037/03/012/027
E032/E314

On the Form Of Cometary Envelopes

There are 3 figures and 13 references, 2 of which are French, 1 Swedish, 2 English and 8 Soviet.

ASSOCIATION: Stalinabadskiy politekhnicheskiy institut
(Stalinabad Polytechnical Institute)

SUBMITTED: February 6, 1960

Card 5/5

✓

MAROCHNIK, L.S.

Certain mechanisms of the radio emission by comets. Biul.
Kom.po komet.i meteor. AN SSSR no.5:21-27 '61. (MIRA 14:6)

1. Institut astrofiziki AN Tadzhijskoy SSR.
(Comets)
(Radio astronomy)

MAROCHNIK, L.S.

Trajectory of the flow in a magnetic tube connected with the sun.
Astron.smur. 38 no.3:409-418 My-Je '61. (MIRA 14:6)
(Magnetohydrodynamics) (Solar radiation)

S/035/62/000/005/062/098
A055/A101

AUTHOR: Marochnik, L. S.

TITLE: Shock waves in comets

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 64.
abstract 5A487 ("Astron.tsirkulyar", 1961, May 30, no. 222, 13-16)

TEXT: The possibility of applying the shock waves theory to comets is examined. The possibility of the emergence of shock waves in the nucleus and on the periphery of the head of a comet is substantiated. At a collision with a solar corpuscular stream, shock waves penetrate into the stream and into the comet's head; the interface of both media moves towards the comet's tail, into which is swept off, from the head, the whole of the ionized matter. The interface velocity is estimated: $10^5 - 10^7$ cm/sec, which is in agreement with observations. Several phenomena occurring in the comets ("envelopes", comet brightness flares etc) are explained from the gas dynamical point of view.

M. Frolov

[Abstracter's note: Complete translation]

Card 1/1

L 19288-63 EWT(1)/FCC(w)/BDS/ES(v) AFFTC/ESD-3 Po-4/Pe-4/Pi-4 TF
ACCESSION NR: AR3006547 s/0169/63/000/008/A039/A039

SOURCE: RZh. Geofizika, Abs. 8A191

AUTHOR: Marochnik, L. S.

TITLE: On the correlation of geomagnetic disturbances to cometary activity

CITED SOURCE: Byul. In-ta astrofiz. AN TadzhSSR, no. 32, 1962, 38-41

TOPIC TAGS: cometary activity, comet, Peltier 1936a, Finsler 1937f, geomagnetic perturbation

TRANSLATION: The velocity and form of the shower causing flashes and geomagnetic disturbances are determined from the delay in the onset of geomagnetic disturbances relative to the flashes in the brightness of the comets Finsler 1937f and Peltier 1936a. The calculations performed, favor the hypothesis of the radial nature of the streams causing the flashes of the comets.

DATE ACQ: 06Sep63

SUB CODE: PH

ENCL: 00

Card 1/1.

MAROCHNIK, Leonid Samoylovich; FAYNBOYM, I.B., red., RAKITIN, I.T.,
tekh. red.

[Physics of comets] Fizika komet. Moskva, Izd-vo "Znanie,"
1962. 39 p. (Novoe v zhizni, nauke, tekhnike. IX Seriya. Fizika
i khimiya, no.12) (MIRA 15:6)

(Comets)

MAROCHNIK, L.S.

Plasma nature of the cometary head; ionization problem. Astron.
zhur. 39 no.4:678-688 J1-Ag '62. (MIRA 15:7)

1. Institut astrofiziki AN Tadzhikskoy SSR.
(Comets) (Plasma (Ionized gases))

S/033/62/039/006/015/024
E032/E114

AUTHOR: Marochnik, L.S.

TITLE: Interaction of solar corpuscular streams with the atmospheres of comets. I.

PERIODICAL: Astronomicheskij zhurnal, v.39, no.6, 1962, 1067-1073

TEXT: An attempt is made to develop a theory of stationary shock waves for applications to comets. The collision of the head of a comet with a corpuscular stream due to a chromospheric flare is discussed in terms of magnetohydrodynamics, which is said to be a fundamentally new approach to the analysis of the various phenomena in comets. A review of published information is made in order to show that existing data are consistent with a shock wave description of this phenomenon. It is assumed in the analysis that the shock wave propagates over the ions and that it may be regarded as plane and perpendicular. It is shown that the collision between a stream and a comet gives rise to direct and reflected shock waves, and expressions are derived for the shock wave parameters. Magnetic fields are neglected, and the stream and cosmic ray media are assumed to be polytropic with
Card 1/2

Interaction of solar corpuscular...

S/033/62/039/006/015/024
E032/E114

$\gamma = 5/3$ and $1/3$ respectively. A detailed analysis of the theoretical results now obtained will be given in future papers. A partial account is reported in Astron. zh. v.39, 1962, 678 by the present author. There is 1 figure.

ASSOCIATION: Institut astrofiziki Akademii nauk TadzhSSR
(Institute of Astrophysics, AS Tadzh.SSR)

SUBMITTED: October 10, 1961

Card 2/2

MAROCHNIK, L.S.

Interaction of solar corpuscular streams with comet atmospheres.
Geomag. i aer. 3 no.4:608-615 J1-Ag '63. (MIRA 16:11)

1. Astrofizicheskiy institut AN radzhikskoy SSR.

S/033/63/040/002/011/021
E001/E120

AUTHOR: Maroshnik, L.S.

TITLE: Wave motions in cometary tails

PERIODICAL: Astronomicheskii zhurnal, v.40, no.2, 1963, 284-287

TEXT: Motions very similar to wave motions are observed in ionized tails of type I comets. The author analyzes various hypotheses which were advanced for explaining these motions, including the following: mechanical theory, the motion of charges in a magnetic field, the passage of a corpuscular stream through the cometary head, the equilibrium state of all forces acting upon the plasma of the tail. They are found to be inadequate or to have very little probability of explaining the motions observed. It is suggested that a more natural explanation is the possibility of turbulence arising due to flow around the effective nucleus of the comet or to Alfvén waves. The article deals with the latter possibility. Some regularities of wave motions observed in the tail of the Neowise comet 1998 are considered, and graphs are presented which show the changes in wavelength and amplitude of the wave as functions of distance from the nucleus, z. The increase of
Card 1/2

Wave motions in cometary tails

S/033/63/040/002/011/021
E001/E120

these quantities with increasing distance from the head to the tail is explained by an increase in the local Alfvén velocity

$v_a = H / \sqrt{4\pi\rho}$ with increasing z , i.e. assuming that density in the tail decreases more rapidly than field intensity H .

Assuming a high conductivity of the tail plasma, the field attenuation is estimated by Cowling's formula and found to be insignificant. The H -variation along the tail length is also considered to be small, i.e. $\text{grad } H$ is low, which is to be seen from the following formula obtained from the analysis of observational data:

$$H(z) \approx \text{const} \left(1 + \frac{1.87}{z}\right) \quad (7)$$

where z is measured in arc minutes. This conclusion is in agreement with Alfvén's considerations (Tellus, v.9, 1957, 92).

There are 2 figures.

ASSOCIATION: Institut astrofiziki, Akademii nauk TadzhSSR
(Institute of Astrophysics, AS TadzhSSR)

Card 2/2

SUBMITTED: June 20, 1961

MAROCHNIK, L.S.

Interaction of solar corpuscular streams and atmospheres of comets. Part 2: "Collapsing" envelopes. Radio emission. Astron. zhur. 40 no.3:504-513 My-Je '63. (MIRA 16:6)

1. Institut astrofiziki AN Tadzhikskoy SSR.
(Cosmic radiations, Radio-frequency)
(Comets)

MAROCHNIK, L.S.

Factors causing the ionization of molecules in comets. *Astron. zhur.*
40 no.4:714-716 J1-Ag '63. (MIRA 16:8)

1. Institut astrofiziki AN Tadzhikskoy SSR.
(Comets)

MAROCHNIK, L.S.

Magnetic effect of meteors. Geomag. i aer. 4 no.1:193
Ja-F '64. (MIRA 17:2)

1. Astrofizicheskiy institut AN Tadzhikskoy SSR.

L 3h182-65 EWT(1)/EWG(v)/EWG(m)/EEC-l/EEC(t)/EWA(h) Po-4/Pe-5/Pq-4/Pae-2/Peb/
Pi-4 GW
ACCESSION NR: AR5004840 S/0269/64/000/012/0068/0068

SOURCE: Ref. zh. Astronomiya. Otd. vyp., Abs. 12.51.556

H0
B

AUTHORS: Marochnik, L. S.

TITLE: Interaction between a solar "wind" with Maxwellian velocity distribution and the head of a comet

CITED SOURCE: Byul. Komis. po kometam i meteoram Astron. soveta AN SSSR, no. 9, 1964, 19-22

TOPIC TAGS: comet, solar wind

TRANSLATION: The drift kinetic equation method is used to analyze the interaction between solar wind and an ionized comet atmosphere. The collisions between the wind particles and the coma particles are disregarded. It is assumed that at the instant of encounter with the wind there is already a magnetic field in the coma. Using the drift integrals of the characteristics of the Boltzmann equation, it becomes possible to show that as the wind penetrates into the coma, in the region

Card 1/2

L 31182-65

ACCESSION NR: AR5004840

of a growing magnetic field, the wind density cumulates approximately like $n \sim H^{1/2}$. (The wind is assumed to be quasineutral.) A similar growth in the density leads to an intense ionization of the comet molecules by charge exchange with protons, and in some cases it can cause a halo jet. L. Marohnik.

SUB CODE: AA

ENCL: 00

Card 2/2

ACCESSION NR: AP4009941

S/0057/64/034/001/0183/0185

AUTHOR: Marochnik, L.S.

TITLE: On the structure of small scale magnetohydrodynamic turbulence

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.1, 1964, 183-185

TOPIC TAGS: plasma, turbulence, magnetohydrodynamics, magnetohydrodynamic turbulence, small scale magnetohydrodynamic turbulence, magnetohydrodynamic dynamo, two fluid Ohm law, Cowling theorem

ABSTRACT: Starting from the "accurate Ohm's law", derived from the two-fluid approximation, and referring to work of A.Schlüter (Zs.Naturforsch.,5a,72,1950), the author writes a magnetohydrodynamic equation for the time derivative of the magnetic field (induction equation) which contains several terms not usually found. The equation for the time derivative of the average magnetic energy density deduced from this induction equation by averaging over a region of linear dimension L differs from the corresponding equation of G.K.Batchelor (Proc.Roy.Soc.,201A,72,1950) by the presence of two terms proportional to the square of the ratio a_0 of the velocity of light to the plasma frequency. The length L is said to be of the order of the geome-

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ACC.NR: AP4009941

tric mean of the electron and ion Larmor radii when the kinetic energy is of the same order as the magnetic energy. When $L \gg a_0$, the new terms are not important and the usual theory is applicable. When $L \ll a_0$, turbulence can develop and the magnetic field can grow as a consequence of the stretching of lines of current flow (rather than magnetic lines of force) when the magnetic Reynolds number is ~~greater~~ less (rather than greater) than unity. In this case Cowling's theorem concerning the non-existence of a stationary magnetohydrodynamic dynamo in a two dimensional field is no longer valid. Orig.art.has: 12 formulas.

ASSOCIATION: none

SUBMITTED: 22Jan63

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: PH

NR REF SOV: 001

OTHER: 002

2/2
Card

L 10746-65 EWT(1)/EWP(m)/EPA(sp)-2/ENG(v)/EPR/EPA(w)-2/T-2/EWA(m)-2 Pd-4/Pe-5/
 Pi-4/Ps-4/Pab-2h IJP(c)/BSD/AEDC(a)/ESD(gs)/AEDC(b)/SSD/AFETR/AFWL/RAEM(c)/
 ASD(p)-3/ASD(f)-2/ESD(t)
 S/0057/64/034/010/1852/1855
 ACCESSION NR: AP4046346

AUTHOR: Marohnik, L.S.

TITLE: Some remarks concerning stationary magnetohydrodynamic turbulence B

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.10, 1964, 1852-1855

TOPIC TAGS: magnetohydrodynamics, turbulent plasma, magnetic field intensity, plasma magnetic field

ABSTRACT: This paper is concerned with the applicability of the criterion of G.K. Batchelor (Proc. Roy. Soc. 201A, 405, 1950) for the spontaneous growth of the magnetic field in a turbulent conducting medium. The original derivation of this criterion was limited to small fields by the neglect of the term $(\text{curl } H) \times H$ in the magnetohydrodynamic equations, where H is the magnetic field. In the present paper this term is retained and a "generalized vorticity" $\Omega = \omega + h$ is introduced, where ω is the vorticity (the curl of the velocity) and $h = f_0 H / c(4\pi\rho)^{1/2}$, where f_0 is the ion Langmuir frequency and ρ is the density. It is shown that Ω^2 and h^2 are distributed identically when the kinematic and magnetic viscosities are equal, and that h^2 increases at the expense of ω^2 when the magnetic viscosity is less than the kin-

1/2

L 10746-65

ACCESSION NR: AP4046348

matic. It is concluded that Batchelor's criterion is valid in an incompressible conducting turbulent fluid for arbitrarily strong fields. Orig.art.has: 28 formulas

ASSOCIATION: Institut astrofiziki AN Tadzhikskoy SSR, Dushanbe (Astrophysics Institute, AN Tadzhik SSR)

SUBMITTED: 29Dec63

ENCL: 00

SUB CODE: ME,EM

NR REF SOV: 004

OTHER: 004

2/2

MAROCHNIK, L.S.

Structure of small-scale magnetohydrodynamic turbulence. Zaur.
tekh. fiz. 39 no.1:183-185 Ja '64. (MIRA 17:1)

MAROCHNIK, L.S.

Collisionless hydrodynamics in noninertial reference systems.
Astron.zhur. 41 no.2:264-273 Mr-Apr '64. (MIRA 17:4)

1. Institut astrofiziki AN TadzhSSR.

MAROCHNIK, L.S.

Cumulative effects in comets. *Astron. zhur.* 41 no. 4: 733-737
Jl-Ag '64 (MIRA 17:8)

1. Institut astrofiziki AN Tadzhikskoy SSR.

ACCESSION NR: AP4017156

S/0053/64/082/002/0221/0252

AUTHOR: Marochnik, L. S.

TITLE: Magnetohydrodynamic phenomena in comets and their connection with the geoactive streams

SOURCE: Uspekhi fizicheskikh nauk, v. 82, no. 2, 1964, 221-252

TOPIC TAGS: comet, magnetohydrodynamic, geoactive stream, corpuscular stream, magnetohydrodynamics in comet, frozen in magnetic field, comet tail, comet envelope, collapsing envelope, shock wave in comet, comet head outline, ionization in comet

ABSTRACT: The various difficulties involved in reconciling the different mechanical and spectral characteristics of comets with the earlier mechanical theories are reviewed, along with the main features of comet structure. A point of view is developed wherein the magnetohydrodynamic processes that occur when a comet crosses a cor-

~~Card~~

1/3

ACCESSION NR: AP4017156

puscular stream with a frozen-in magnetic field can account for the existence of comets with straight tails (type I), both expanding and collapsing comet envelopes, comet jets, and peculiarities in the comet outline. The correlation observed between various activities in comets (acceleration in tails of type I, halos, jets) and geomagnetic disturbances are likewise considered in terms of magnetohydrodynamics. Difficulty is still encountered in explaining the appearance of ions in comets. The section headings are: Introduction. 1. Plasma nature of the comet head. 2. Fundamental feasibility of magnetohydrodynamic description of phenomena in comets. 3. Shock waves in comets. 4. "Collapsing" envelopes. 5. Outlines of comet heads. 6. The problem of molecule ionization in comets. 7. Accelerations in ionized tails. 8. Structural features of ionized tails. Orig. art. has: 12 figures, 50 formulas, and 2 tables.

ASSOCIATION: None

Card-

2/3

ACCESSION NR: AP4017156

SUBMITTED: 00

DATE ACQ: 19Mar64

ENCL: 00

SUB CODE: PH, AS

NO REF SOV: 079

OTHER: 092

Card 3/3

MAKSIKOV, M.N.; MAROCHNIK, I.S.

Collective processes in gravitating systems. Part 2. *Astron. zhur.* 42 no.6:1261-1269 N-S '65. (MIRA 1966)

1. Institut astrofiziki AN TadzhSSR. Submitted March 11, 1964.

MAKSUMOV, M.D.; MARONCHIK, I. .

The critical wavelength for ...
AN SSSR 164 No. 5:1976-1977 (1976) (CIPA 18:10)

1. Institut astrofiziki ... January 3, 1965.

L 64792-65

EFP(c)/EWT(1)/EWT(m)/EWA(h)/EWP(b)/T/EWP(t) IJP(c) GG/AT/JD

ACCESSION NR: AP5018728

UR/0070/65/010/004/0567/0567

AUTHORS: Maronchuk, I.Ye.; Khaynovskaya, V.V.; Edel'man, F.L.

TITLE: Etching of gallium arsenide and indium antimonide with iodine vapor

SOURCE: Kristallografiya, v. 10, no. 4, 1965, 567

TOPIC TAGS: gallium arsenide, indium compound, etched crystal, crystal dislocation, iodine, iodide, semiconductor crystal

ABSTRACT: Etching of semiconductor crystals with iodine vapor has been extended to III-V semiconductors whose components react with the iodine vapor. This method coupled with plastic deformation makes it possible to observe the traces of individual dislocations moving in the direction of slipping. n-type GaAs and InSb crystals with initial dislocation densities of 10^3 and 10^2 cm^-2 respectively were placed into a quartz tube furnace where the temperature in the etch-

Card 1/2

L 64792-65

ACCESSION NR: AP5018728

ing region was 400C for GaAs and 250C for InSb. The rate of supply of iodine vapor was controlled by means of a stream of helium or hydrogen. The plastic deformation was carried out within the furnace. The deformation lasted between 2 and 3 minutes. Orig. art. has: 1 figure.

ASSOCIATION: Institut fiziki tverdogo tela i poluprovodnikovoy elektroniki (Institute of Solid State Physics and Semiconductor Electronics)

SUBMITTED: 29 Aug 64

ENCL: 00

SUB CODE: SS

NR REF SOV: 001

OTHER: 001

Card

NC
2/2

RETHY, L.; RAUSS, K.; KETTYI, I.; MAROCZI, J.

Studies on the immune effect of *Shigella* and tetanus antigens combined with "Booster" antigens. *Acta microb.hung.* 6 no.2: 93-101 '59.

1. Anatoxin Department, Research Institute "Human" for Vaccine Production, Budapest and Institute of Microbiology, Medical University, Pecs.

(DYSENTERY BACILLARY immunol.)

(TETANUS immunol.)

(ANTIGENS)

RETHY, Lajos, dr.; MAROCZI, Jozsef, dr.; JOO, Istvan, dr.

Immunological interrelationships in simultaneous administration of Sabin's poliomyelitis and combined diphtheria-tetanus-whooping cough vaccines. I. Effect of Sabin's poliomyelitis vaccine on immunological effects of combined diphtheria-tetanus-whooping cough vaccine. Orv. hetil. 101 no.26:915-916 26 Je '60.

1. "Human" Oltoanyagtermelo es Kutato Intezet, Budapest.
(POLIOMYELITIS immunol.)
(DIPHTHERIA immunol.)
(TETANUS immunol.)
(WHOOPIING COUGH immunol.)
(VACCINATION)

RETI, L. [Rethy, L.]; MAROTSI, Y. [Maroczi, J.]; KELEMEN, G.;
PACHA, Sh. [Pacsa, S.]; YOO, I. [Yoo, I.]

Immunological effectiveness of simultaneous use of a trivaccine
against diphtheria, tetanus, and whooping cough and a live
monovalent vaccine against poliomyelitis from Sabin's strains.
Vop. virus. 7 no. 1:29-36 Ja-F '61. (MIRA 14:4)

1. Nauchno-issledovatel'skiy i proizvodstvennyy institut vaktsin i
syvorotok "Guman", Budapesht, Mikrobiologicheskii institut
Meditsinskogo universiteta i virusnaya laboratoriya sanitarno-
epidemiologicheskoy stantsii Komiteta Baranya, gorod Pech, Vengriya.
(DIPHTHERIA) (TETANUS) (WHOOPIING COUGH)
(POLIOMYELITIS) (VACCINES)

KELEMEN, Geza, dr.; MAROCZI, Jozsef, dr.; PACSA, Sandor; RETHY, Lajos, dr.

Immunological effect of simultaneous administration of poliomyelitis and combined diphtheria-tetanus-pertussis vaccines. II. Effect of combined diphtheria-tetanus-pertussis vaccine on immunological activity of Sabin's monovalent poliomyelitis vaccine. Orv.hetil. 102 no.6:249-250 5 F'61.

1. Orvostudományi Egyetem, Mikrobiológiai Intézet, Pécs. Baranya megyei Kórház. Víruslaboratórium, Pécs. Humán Óltóanyagtermelő és Kutató Intézet, Budapest.

(VACCINATION)
(POLIOMYELITIS immunol)
(DIPHTHERIA immunol)
(TETANUS IMMUNOL)
(WHOOPING COUGH immunol)

MAROCZI, Jozsef, dr.; technikai munkatarsak: ANGYAL, Janosne; BACSKAI, Laszlo

Vaccinia antihemagglutinin titer of the blood plasma of infants inoculated with smallpox vaccine, after vaccination with living attenuated poliovaccine. (Preliminary report). Orv. hetil. 103 no.42:1988-1989 21 0 '62.

1. Human 0ltoanyagtermelo es Kutato Intezet, Budapest.
(POLIOVIRUS VACCINE, ORAL) (SMALLPOX VACCINE)
(HEMAGGLUTINATION)

KISZEL, Janos; MAMCNY, Jozsef

Use of lyophilized Yersinia medium in the cultivation of leishmania.
Kiserl. orvostud. 16 no.4:344-347 Ap '64.

1. Budapesti Orvostudományi Egyetem I sz. Koi Klinikája és Labor
Gitoanyagtermelő és Kutató Intézet.

MAROEVIC, E.

Angenesia sacrococcygea. Report of a case. Acta chir.iugosl. 7(8)
no.3:267-270 '60.

1. Ortopediski odjel Opce bolnice u Osijeku (Sef dr. Egon Maroevic)
(SACROCCYGEAL REGION abnorm)

ANTAI, Albert; MAROFKA, Ferenc

Operated case of malignant retroperitoneal myoma. Magy. noorv. lap
20 no.6:362-364 Dec 57.

1. A szegedi megyei jogu korhas szuleszeti es noogyaszati osztalyanak
kozlemenyfe orvos: Bodis Lajos.

(LEIOMYOMA, surg.)

retroperitoneal space, malignant (Hun))

(LEIOMYOMA, malignant, surg. (Hun))

MAROKIN S.N.

25-5E-2-E/41

AUTHOR: Marokin, S.N., Chief of the Department of Standards and Technical Specifications of the Gosplan of the BSSR

TITLE: From the Work of the Department of Standards and Technical Specifications of the Gosplan BSSR (Iz praktiki raboty otdela standartov i tekhnicheskikh usloviy Gosplana BSSR)

PERIODICAL: Standartizatsiya, 1958, Nr 2, pp 19-21 (USSR)

ABSTRACT: The Soviet Republics have obtained the right to approve the technical specifications for food products, industrial and agricultural products, except for those covered by All-Union standards. This article presents information on the functions and rights of the Department of Standards and Standard Specifications, with a staff of 6, organized at the Gosplan of the Belorussian SSR. The author also lists specifications (for beer, wine, canned vegetables, etc.) already approved, and complains of the lack of instructions from the Committee of Standards, Measures and Measuring Devices. The Department of Standards jointly with a commissioner of the Committee of Standards, Measures and Measuring Devices inspected the quality of production and compliance to state standards at the confectionary combine "Spartak" (in Gomel') and the confectionery

Card 1/2

28-58-2-6/41

From the Work of the Department of Standards and Technical Specifications
of the Gosplan BSSR

factory "Krasnyy pishchevik" (in Bobruysk). Information on
approved specifications will be published three times monthly.

ASSOCIATION: Otdel standartov i tekhnicheskikh usloviy Gosplana BSSR
(Department of Standards and Standard Specifications of Gos-
plan BSSR)

AVAILABLE: Library of Congress

Card 2/2

1. Specifications-Standards 2. Standardization-USSR

MAROKOV, N.G., red.; IVANOVA, A.G., tekhn.red.

[Catalog of books, geological maps, and educational posters of
the State Scientific and Technical Publishing House for
Literature on Geology and Conservation of Mineral Resources]
Katalog knig, geologicheskikh kart i uchebnykh plakatov. Moskva,
Gosgeoltekhizdat, 1959. 29 p. (MIRA 12:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo literatury po geologii i okhrane neдр.
(Bibliography--Geology)
(Bibliography--Mines and mineral resources)

YUGOSLAVIA

J. MAROLT [Affiliation not given.]

"Sebastijan Wilhelm (1885-1963)."

Belgrade, Veterinarski Glasnik, Vol 17, No 4, 1963; pp 381-382.

Abstract : Obituary biography and necrologue of this veterinarian who was in charge of the horse-shoe training school in Zagreb from 1921 to 1952 during which time he trained and graduated 2000 technicians in this field. Photograph.

1/1

M. H. ROBERT, M.

29. POSSIBILITIES OF USING VELENJE LIGNITE IN METALLURGY. - Robert, M.
(Nova Drolnava. (New Industry, Ljubljana), 30 Apr. 1955, vol. 6, (1), 4-15).
Experiments have shown that Velenje lignite with a net calorific value of
2000 to 3000 cal/kg and a 40% moisture content will yield a 1500 cal/cu. m gas
which is suitable for use in rolling mill furnaces. Owing to its low
sulphur content this lignite is also useful for blending with coking coal.
(L).

ZARGI, R.; MAROLT-GOMISCEK, M.

Infectious mononucleosis in 1959-1963. Zdrav. vestr. 33 no.10:
344-351 '64

1. Infekcijska klinika medicinske fakultete v Ljubljani
(Predstojnik: prof. dr. M. Bedjanic).

MAROMOROSI, Gyorgy, Dr.; SZONDI, Gyorgi, Dr.

Aminopterin therapy in psoriasis. *Borgyogy. vener. szemle* 11 no.5:185-190
Oct 57.

1. A debreceni Orvostudományi Egyetem Bor- és Nemikortani Klinikájának
(igazgató: Szodoray Lajos dr. egyetemi tanár) közleménye.

(PSORIASIS, ther.
aminopterin (Hun))
(AMINOPTERIN, ther. use
psoriasis (Hun))

MARON, F.L.; AKULICH, V.A.

The K-1B ditcher. *Biul.tekh.-ekon.inform.* no.8:11-12 '59.
(MIRA 13:1)

(Peat machinery)

KC

A-1

Velocity of high-temperature reactions. I. Kinetics of reduction of magnesium oxide by various reagents. A. S. Mikhlin. II. Reduction of phosphorus. A. S. Mikhlin and F. S. Maron (*J. Appl. Chem. Russ.*, 1941, 14, 19—29, 30—36)—1. The temp. of initiation, θ , of the reaction between MgO and various reducing agents varies parallel with pres-

sure. At high pressures the value of θ can be 1150—1200°C. At 1200°C. $\text{MgO} + \text{C} \rightarrow \text{Mg} + \text{CO}$. The velocity of the reaction $\text{CaO} + \text{CO} \rightarrow \text{Ca} + \text{CO}_2$ increases with the increase of diameter of the granules of substrate. The reaction is completed in 17 min. at 1400°C. when the particle diameter is 2—3 mm, and in 1.5 min. when the diameter is 0.1 mm.

MARON, F. S.

Mar 1948

USSR/Chemistry- Calcium carbonate
Chemistry- Electrolytes

"Electrolytic Nature of Liquid Commercial Calcium Carbide," P. V. Gel'd, G. A. Yasin,
F. C. Maron, Ural Industrial Inst ineni S. M. Kirov; Ural Sci Res Chem Inst, 9 pp

"Zhur Prikl Khim" Vol XIII, No 3

Discuss the structure of commercial calcium carbide in both solid and liquid states: in
the latter state it is a strong electrolyte. Like molten silicates, its conductivity is
mainly dependent on ions of small magnitude. Submitted 30 Jun 1947.

PA 70¹20

MARON, F. S.

MARON, F. S. I MIKULINSKIE, A. S.

36146 Vosstanovleniye Kremnezema uglerodom. V sb Teoriya i praktika rudnoy elektrotermii. Sverdlovsk-Moskva, 1948, S. 33-44.--Bibliogr: 6 nazv.

SO: Letopis' Zhrunal'nykh Statey, No. 49, 1949

MALON, F. S.

3417. MELNICHENKO, A. S., L. I. MALON, F. S. Mashevskiy i shchegolovaya...
V So: Teoriya i praktika raboty elektrotornii. Sverdlovsk-Moskva, 1971, S. ...

SO: Leto is' zhurnala in K. Sestey, No. 12, 1972

MARON, F. S.

361.8. MARON, F. S., i M. S. V. VII anige sobavok na rosi no fuidoo kua vaniya.
V sb: Teoriya i praktika radice elike ovanii. Sv. Slovsk-Moskva. 1.1, 3.1. - .
Bibliograf: 13 Nazv.

SO: Letopis Journal: 19. 3. 19, No. 19, 19.

MAHON, F. S., MIKULINSKIY, A. S.
36180 Skorost' protokaniya reaktsii polvcheniya sul'fida alyuminiya. V sb: Teoriya i
praktika rudnoy elektrotermii. Sverdlovsk-Moskva, 1948, S. 57-58.

SO: Letopis Zhrunal'nykh Statey, No. 49, 1949